BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of the work: **Estimate for Improvements and Asphalting to roads at Virupakshapura and Surrounding Areas in ward No 09 in Vidyaranyapura sub Division.**

							Estimate Cost:		3000000.00
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 138 / Item No. 19.1/ PWD SR 2014-15**	Cum							
	Drain Desilting								
			2	110.00	0.45	0.35	34.65		
			2	120.00	0.45	0.35	37.80		
			2	100.00	0.45	0.35	31.50		
	Berm Cutting								
			2	110.00	1.20	0.25	66.00		
			2	120.00	1.20	0.25	72.00		
			2	100.00	1.20	0.20	48.00		
							289.95	75.60	**21920.00**
	Basic Rate	70.00							
	Area Weightage @8%	5.60							
	Total	**75.60**							
2	Removing B.S Slab of Drain and stacking **Page No. 25 / Item No. 5.32 / PWD SR 2014-15**	Sqm							
	Main Road Vaishnavai Layout		2	110.00		1.35	297.00		
			2	120.00		1.35	324.00		
	Srinidhi layiut 8th A Cross		2	100.00		1.35	270.00		
							891.00	58.32	**51963.00**
	Basic Rate	54.00							
	Area Weightage @ 8%	4.32							
	Total	**58.32**							
3	Refixing stone slabs of drains and pointing in C.M (1:3) **Page No. 25 / Item No. 5.33 / PWD SR 2014-15**	Sqm							
			Qty Vide Item No. 2				**891.00**	75.60	**67360.00**
	Basic Rate	70.00							
	Area Weightage @ 8%	5.60							
	Total	**75.60**							
	KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12/ Item No. 4.3/ PWD SR 2014-15**	Cum							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
			2x2	110.00	0.30	0.10	13.20		
			2x2	120.00	0.30	0.10	14.40		
			2x2	95.00	0.30	0.10	11.40		
							39.00	4847.04	**189035.00**
	Basic Rate	4488.00							
	Area Weightage @ 8%	359.04							
	Total	**4847.04**							
5	KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not les than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20 cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. **Page No. 25 / Item No. 5.27 / PWD SR 2014-15**	Sqm							
			2x2	110.00		0.20	88.00		
			2x2	120.00		0.20	96.00		
			2x2	95.00		0.20	76.00		
							260.00	993.60	**258336.00**
	Basic Rate	920.00							
	Area Weightage @ 8%	73.60							
	Total	**993.60**							
6	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix 1:2:4 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2014-15**	Cum							
	Coping		2x2	110.00	0.20	0.10	8.80		
			2x2	120.00	0.20	0.10	9.60		
			2x2	95.00	0.20	0.10	7.60		
	Bottom		2	110.00	0.45	0.10	9.90		
			2	120.00	0.45	0.10	10.80		
			2	95.00	0.45	0.10	8.55		
							55.25	5327.64	**294352.00**
	Basic Rate	4933.00							
	Area Weightage @ 8%	394.64							
	Total	**5327.64**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
7	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **Page No. 13 / Item No. 4.11 / PWD SR 2014-15**	Cum							
			2	110.00	0.90	0.10	19.80		
			2	120.00	0.90	0.10	21.60		
			2	95.00	0.90	0.10	17.10		
							58.50	6065.28	**354819.00**
	Basic Rate	5616.00							
	Area Weightage @ 8%	449.28							
	Total	**6065.28**							
8	KSRB 4.9.2: Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **TMT Bars FE 500 Page No. 17 / Item No. 4.46.2 / PWD SR 2014-15**	Tonne							
			0.05	58.50			2.93		
							2.93	78351.84	**229179.00**
	Basic Rate	72548.00							
	Area Weightage @ 8%	5803.84							
	Total	**78351.84**							
9	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and **removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm** including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.18 / PWD SR 2014-15**	Sqm							
			2	110.00	0.60		132.00		
			2	120.00	0.60		144.00		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
			2	95.00	0.60		114.00		
			3	110.00		0.15	49.50		
			3	120.00		0.15	54.00		
			3	95.00		0.15	42.75		
	Basic Rate	291.00					**536.25**	314.28	**168533.00**
	Area Weightage @ 8%	23.28							
	Total	**314.28**							
10	KSRRB 300-47: scarifying kankar/gravel/metal crust upto 150mm thick with pick axes and disposal of stuff within a lead of 100 meters including cost of all labour charges complete as per specifications MORTH chapter 3, **No. 143 / Item No. 19.53 / PWD SR 2014-15**	Sqm							
			2	110.00	1.50		330.00		
			2	120.00	1.40		336.00		
			2	100.00	1.50		300.00		
							966.00	22.68	**21909.00**
	Basic Rate	21.00							
	Area Weightage @ 8%	1.68							
	Total	**22.68**							
11	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **Page No. 154 / Item No. 20.18 PWD SR - 2014-15**	Cum							
			2	110.00	1.50	0.20	66.00		
			2	120.00	1.40	0.20	67.20		
			2	100.00	1.50	0.20	60.00		
							193.20		
	Road Cut Portion @ 10%						19.32		
							212.52	1438.56	**305723.00**
	Basic Rate	1332.00							
	Area Weightage @ 8%	106.56							
	Total	**1438.56**							
12	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM, WMM including cleaning of road surface and spraying primer at the rate of 0.60 Kg / sqm using mechnical means complete as per specifications. MORTH specification NO. 502, **Page No. 157 / Item No. 21.6 / PWD SR 2014-15**	Sqm							
			1	110.00	6.00		660.00		
			1	120.00	5.50		660.00		
			1	100.00	5.50		550.00		
							1870.00	31.32	**58568.00**
	asper Revised Basic Rate	29.00							
	Area Weightage @ 8%	2.32							
	Total	**31.32**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
13	KSRRB 500-11: Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, 50 / 75mm compacted thickness with 3.3% bitumen but excluding cost of primer / tack cost with lead upto 1km including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH chapter 5, **using 100/12 TPH capacity h.M.P with sensor paver gr-II (50 mm to 75 mm) with 3.3 % VG-30 Bitumen, Page No. 158 / Item No. 21.11.2/ PWD SR 2014-15**	Cum							
			1	110.00	6.00	0.050	33.00		
			1	120.00	5.50	0.050	33.00		
			1	100.00	5.50	0.050	27.50		
							93.50		
	Consider Pot Hole, Road Cutting and Depression Filling @ 25%						23.38		
							23.38	6716.52	**156999.00**
	as per Revised Basic Rate	6219.00							
	Area Weightage @ 8%	497.52							
	Total	**6716.52**							
14	KSRRB M500-19: Providing and laying **bituminous concrete** crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grad, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve, the desired compaction as per MORTH specification clauses No. 500.9 complete in all respects complete as pr specifications. **Using 100/120 TPH capacity H.M.P with sensor paver Gr-II (30 mm to 45 mm) with 6 % CRMB 55 Page No. 151 / Item No. 21.23 / PWD SR 2014-15**	Cum							
			1	110.00	6.00	0.040	26.40		
			1	120.00	5.50	0.040	26.40		
			1	100.00	5.50	0.040	22.00		
							74.80	10288.08	**769548.00**
	as per Revised Basic Rate	9526.00							
	Area Weightage @ 8%	762.08							
	Total	**10288.08**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
15	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)	Cum							
			Vide Item No. 1				**289.95**	73.57	**21332.00**
	Average weight of earth 1.28 tonne / kg for 2x1.28x2.00=5.12	5.12							
	Add loading and unloading charges Vide item no.17.1 P.no.130	63.00							
		68.12							
	Area Weightage @ 8%	5.45							
	Total	**73.57**							
16	Sub Total								**2969576.00**
17	For Third Part QC inspection Charges @ 1% of Estimate Cost								**29696.00**
18	Miscellaneous and other Charges	L/S							**728.00**
								Total	**3000000.00**
	(Rupees Thirty Lakhs)								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2014-15.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward 9

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidayranyapura Sub Division

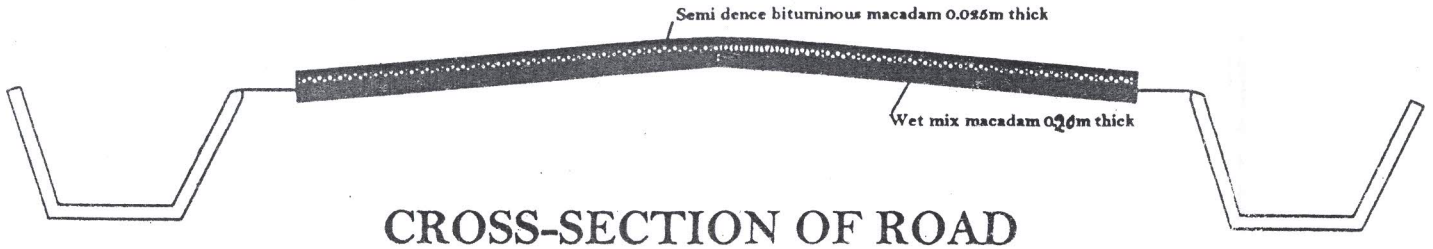
Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Administrative Approval
Accorded For 30.00 lakhRs
Head of A/C P3089
NO : 30 Dt: 19.08.15

TA CE (YNK)

Technical Sanction
Accorded For 30.00 lakhRs
Head of A/C P3089
CER NO 47 Dt: 21.08.15

TA CE (YNK)



CROSS-SECTION OF ROAD

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- Wet mix macadam
- Semi dence bituminous concret

Assistant Executive Engineer
Vidyaranyapura Sub Division
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